#### **Commonwealth of Kentucky**

Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

### AIR QUALITY PERMIT

**Permittee Name:** The Hennegan Company

Mailing Address: 7455 Empire Dr., Florence, Ken

is authorized to operate a printing business using offset chograph

Source Name: The Hennegan Compar

Mailing Address: 7455 Empire Dr.

Florence, Kenty 34104

Source Location: 7455 Empire 7

Permit Type: Federally inforceable art 70

Review Type: Synthetic Mix Title V

Permit Number: V. 36

Log Number: F366

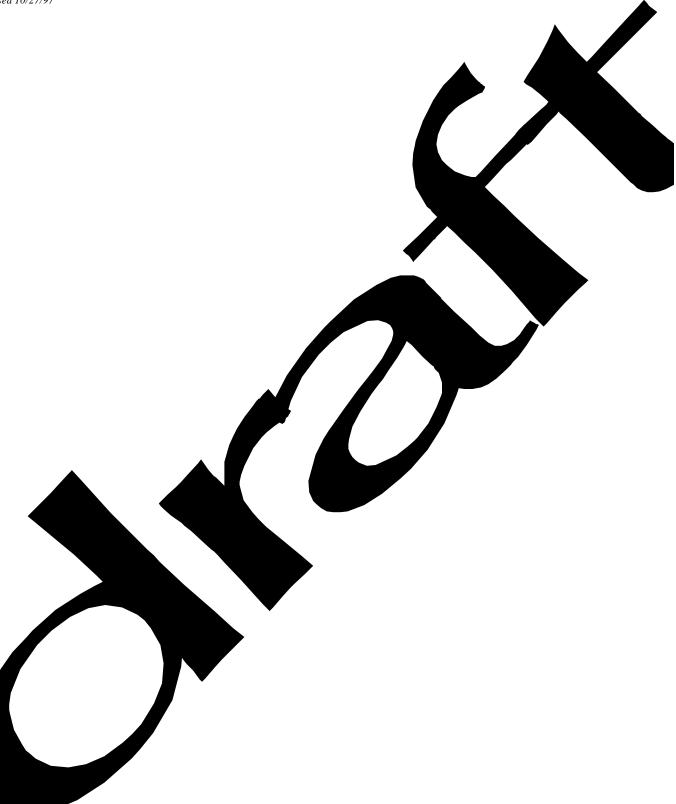
Application

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ID #: 80-0088

County: Florence Soone

**Issuance Dat Expiration D** 



### TABLE OF CONTENTS

<u>SECTION</u>		DATE OF ISSUANCE	
SECTION A	PERMIT AUTHORIZATION	1	
SECTION B	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS		2
SECTION C	INSIGNIFICANT ACTIVITIES		11
SECTION D	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS		
SECTION E	SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENT	15	
SECTION F	MONITORING, RECORD KEEPING, AND REPOFTING REQUIREMENTS		16
SECTION G	GENERAL CON JONS		19
SECTION H	ALTERN ERATING SCEN		24
SECTION I	OMPLIAN	25	

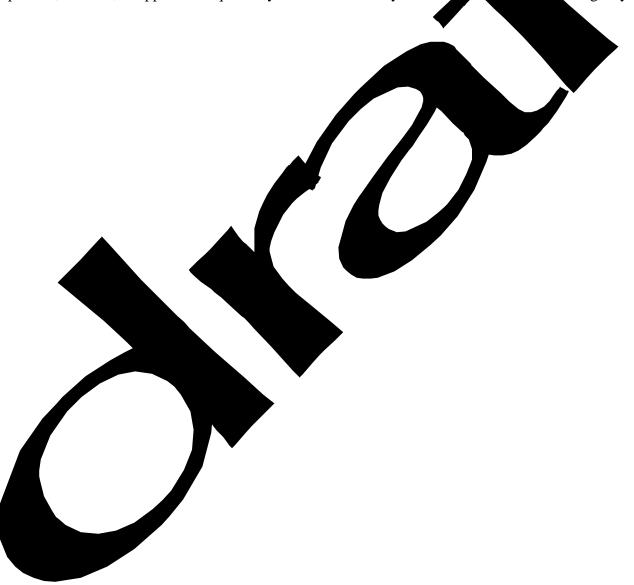
**Permit Number:** <u>V-98-032</u> **Page:** <u>1</u> **of** <u>26</u>

#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application which was determined to be administratively and technically complete on December 9, 1997, the Kentucky Division for Air Quality hereby authors the construction and operation of the equipment described herein conditions of this permit. permit has been issued under the provisions of Kentucky Revised Statutes Characteristics.

The permittee shall not construct, reconstruct, or modify any affected submitted a complete application and receiving a permit for the plannature authority, except as provided in this permit or in the Regulation 401 I

Issuance of this permit does not relieve the permittee from the responsible uning any other permits, licenses, or approvals required by this Cabinet or any other fed.



**Permit Number:** <u>V-98-032</u> **Page:** <u>2</u> **of** <u>26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

EP01 and the press that uses heat set ink part of EP02 (01W and 02W)

#### **Description:**

01W and 02W are Baker Perkins G14 Web Printing Presses and a fountain distinguish between print area and non-print area with an over and a chiller

01W has a UV curing coating applicator (with no potential to

01W and 02W have a maximum feed rate of 14,000 ft/hr each at 7,000 to 8,000 ft/hr for quality control reasons.

01W and 02W have 6 application stations each which utilize cycling a printable surface 36 inches wide and the capacity to print on both sides and w

01W and 02W are each capable of using heat set ink at a maximum design and 6 gal/hr. The ovens on 01W and 02W each use 2-2.93 MM Btu/hr maximum heat in the web.

01W and 02W have computer controlled automate automate expanding diaphragm to clean ink from the present automate automa

01W construction commenced: 1986. 02W construction commenced: 1991.

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 50:012, real appliance on effective June 24, 1992, requiring implementation of standards for that control procedures the real assonable, a gractical shall be used.

process operations applicable to each affected facility ass a process operations applicable to each affected facility commenced after July 2, 1975, limits particulate emission

#### Operating Limitat

#### 401 K

The following limit the degree of control which is required by Section 1(1) of 401 AR 50:012.

- 1. Negative pressure maintained at the dryer exhaust inlet when the press is in operation.
- 2. An air flow dire on measuring device shall be operated according to manufacturer=s instructions at the oven exhaust inlets.

Note: This condition is required to demonstrate compliance with Operating Limit #1.

equipment must be operated in accordance with Item 2 of Section E to ath Emission Limit #3.

**Permit Number:** <u>V-98-032</u> **Page:** <u>3</u> **of** <u>26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Operating Limitations (Continued):**

#### 401 KAR 50:012

- 4. The fountain solution shall be limited to a maximum of 3% alcohol content by the fountain is refrigerated below 60° F or to a maximum 600% alcohol convolume if the fountain temperature is at or above 60° F.
- 5. A thermometer or other temperature detection device with precision of als or minutes 0.5° F shall be used and attached to a continuous record device to demonstrate temperature of the fountain solution.

Note: This condition is required to demonstrate compliance wit Limit #4.

**6.** A conductivity meter shall be used at the fountain and the metric undoctored water used in the fountain so that isopropyl at sholl measured accurately.

Note: This condition is required to demonstrate compliance with Operating

7. Cleaning solutions shall be limited to a VOC partial to the less than 10 km set 20° C provided closed containers are used to contain solvent laden towels) as demonstrated by at less 50% to be clear if g solution.

#### **Compliance Demonstration Method:**

#### **Operating Limit #4**

If deemed necessary, the Cabinet shall main sample of the fount of solution at the reservoir to verify compliance with this recommendate throughout the sample of the fount of solution at the reservoir gas chromatograph analysis (similar to EPA method 415.1) or refractor of comparisons standard autions.

Conductivity meter readily as the distribution of the same of the

#### 401

To satisfy grequirent FR 70.6, the following limits will apply.

- **8.** Only plane and an antural gas ourned in the ovens.
- 9. Only set web presses shall be used.
- 10.6 ration and the ce shall be practiced in accordance with manufacturers specifications.

### Nonattainment Area Sk ynthetic Minor Limits

See Section D for lim on 02W.

#### sion Limitations:

#### 401 KAR 59:04

Section limits visible emissions to less than 20% opacity.

3(2) limits emissions of particulate matter to a maximum of 2.34 lbs/hr.

**Permit Number:** <u>V-98-032</u> **Page:** <u>4</u> **of** <u>26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Emission Limitations (Continued):**

#### 401 KAR 50:012

As part of the requirements imposed by Section 1(1) of 401 KA 012, the emission limit shall apply.

3. At least 90% of the VOC emissions entering the dryer exhaust dust be eliminated from stack while the press is in operation (see Item 2 of Section for details of Sw this is be accomplished).

#### **Compliance Demonstration Method:**

Initial compliance shall be demonstrated through the result of testing requirements below. Continued compliance shall be demonstrated through the result of testing requirements below. See monitoring section below.

#### Nonattainment Area NSR Synthetic Minor Limits

See Section D for limits on 02W.

#### **Testing Requirements:**

#### 401 KAR 50:012

As part of the requirements imposed by Section 1(1) of 1/1 KAR 50 standard following testing shall be required.

- 1. VOC emissions shall be tested and 180 dy of initial the mal oxidizer operation in accordance with Section G(d) this permit of the once every by years following the initial test in order to demonstrate the at least 90% and properly A shall be used to the operation of the order to demonstrate the at least 90% and properly A shall be used to the operation of the order to the operation of the op
  - a. EPA Method 1 or a ppropriate, 60, Appendix A shall be used to tes.
  - Method 2, D, as appropriate, from 40 CFR 60, Appendix A shall be mine the v w rate of the exhaust stream.
    - ned by good judgment of anticipated destruction 1 25 or 252 st method, from 40 CFR 60, Appendix A shall the best a centration of the exhaust stream **before** and **after** at VOC concentrations are 50 ppm or less, EPA Method 25A acineras the exhaust stream only after incineration may be allowed if should be us roperly submitted protocol which includes procedures for the division a dance of VOCs. An accurate material balance of VOCs would an accurate ma s of VOCs input due to ink use, fountain operation, and cleaning include the m solution used uring the test in conjuction with tested substrate retention of VOCs, capture of fantain VOCs, capture of cleaning solution VOCs, after incineration VOC on, and exhaust stream volumetric flow rate.

**Permit Number:** <u>V-98-032</u> **Page:** <u>5</u> **of** <u>26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Monitoring Requirements:**

#### 401 KAR 50:012

As part of the requirements imposed by Section 1(1) of 401 KA 2012, the monitoring shall be required to demonstrate compliance.

- 1. The temperature of the combustion chamber for the thermal of dizer shall be of anti-monitored while the press is in operation.
- 2. Direction of air flow at the oven exhaust inlet shall be conpusly me cored while the press is in operation.
- 3. Fountain solution conductivity shall be monitored once possible to the fountain shall be monitored during and stabilizes) any additions to the fountain.
- **4.** Fountain solution temperature shall be continuously mon. Fred.
- 5. The amount of cleaning solution used shall be monitored daily and the an solution recovered shall be monitored once per more
- 6. Cleaning solution vapor pressure and VOC co ablished thr credible evidence (ex. MSDS information monitored. If the manufacturer of the cleaning solution char s the form solution, the permittee changes the composition of the or the permittee eaning solv on thro m a differ chooses to use a cleaning solution a with a different it manufac properties composition, the changes in phys shall be monitored. d compositi

#### 401 KAR 59:010

See Operating Limitations #8, #5 and #10 and #10 and #9, and #10 for requirements with will used appliance and replace monitoring that associated associated KAR 59:0.

#### Specific R. g Require

#### 401 KA

As part of ments impreceded the state of the

- 1. The emperation of combustion chamber for the thermal oxidizer shall be recorded continuously by computer, or some other continuous recording device.
- Any air flow mea are not into the in. So we recorded.
- 3. All fountain solution conductivity monitoring shall be recorded.
- **4.** The temperature the fountain solution shall be recorded continuously by a strip chart, computer, or so the continuous recording device.
- 5. The cleaning plution vapor pressure, VOC content, amount used, and amount recovered shall be an idea when monitored (see Specific Monitoring Requirements #5 and #6).
- ctive actions taken to rectify a monitored parameter out of its normal operating shall also be recorded daily.

**Permit Number:** <u>V-98-032</u> **Page:** <u>6</u> **of** <u>26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Recordkeeping Requirements (Continued):**

#### 401 KAR 59:010

To demonstrate compliance with Operating Limit #8,

7. A record of the type of fuel burned in the ovens shall be main ed.

To demonstrate compliance with Operating Limit #9,

**8.** A record of the type of ink used by the presses shall be makined.

To demonstrate compliance with Operating Limit #10,

- 9. A copy of the manufacturers operating and maintenance spear and made available to appropriate division personnel,
- **10.** Any operation or maintenance that is outside of the recommendation shall be recorded,

and 11. Dates of maintenance performance shall be recorded.

#### Nonattainment Area NSR Synthetic Minor Require

See Section D for requirements on 02W.

#### **Specific Reporting Requirements:**

#### 401 KAR 50:012

As part of the requirements imposed by ection 1(1 of 401 KA 56.012, the following reporting requirements shall be require

- 1. Any exceedance of a permit contain, durated, and corrective actions taken shall be itemized in a report (if there is no exceedate or corrective actions taken, this shall be reported also), certified by esponsible at all are inverted or postmarked to the Diffsions Florence Parties of Diffice within a collowing the end of each quarter.
- 2. Description of the converted and concentration with corresponding read item.

  The converted and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and time in a report, certified by a responsible official, and concentration with corresponding and concentration with corresponding

#### Nonattair Requirements of Requirements

See Section D to. ts on 02W.

### Speci<sup>g</sup> Control Equipment Conditions:

See Item 2 of Section to tails.

#### **A Frate Operating Scena os**

N/A

#### pliance Schedule:

Refer to Section

#### nce Certication Con Requirements:

don I for compliance certification required in association with bringing these runits into compliance with requirements set by 401 KAR 50:012. Refer to Item 7 of Section F for other general certification requirements. And, refer to Item (d) of Section G for construction certification requirements.

**Permit Number:** <u>V-98-032</u> **Page:** <u>7</u> **of** <u>26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The press that uses sheet fed ink part of EP02, EP03, and EP04 (01SF, 02SF, 03SF, 04SF, 05SF, 06SF, and 07SF)

#### **Description:**

01SF, 02SF, 03SF, and 04SF are 6-color Heidelberg Sheet I Printing Passes using fountain solution to distinguish between print area and non-present.

**05SF** is a **5-color Harris Sheet Fed Printing Press** using a f between print area and non-print area.

**06SF** and **07SF** are **8-color Heidelberg Sheet Fed UV Setting** Presses using a fountain solution to distinguish between print area and non-print area than to set the ink.

o1SF, 02SF, 03SF, and 04SF each have an aqueous coating station, an amb, and a starch applicator. Additionally, 05SF has an ambient and 07SF when the state of th

These presses are capable of printing at a rate base en 15 and 000 impossions per hour but will typically be operated at 8,000 irratessions per hour.

On the second of these presses print on only one side and have a maximum of 40" by 40".

On the second of the second

06SF and 07SF each utilize UV set at or be a maximum design rate of 7.66 gallons per hour.

All these presses are cleaned manally.

All these presses have no six control equal to the presses that apply to the have a filt

O ction con. 91.

02. SF, 05SF, unstruction commenced: 1996.

07SF c projected. or Jan. 1999.

#### APPLICABLE RF

Remation 401 K. General application effective June 24, 1992, requiring applementation of standard actional primary and secondary ambient air quality, specifies that control procedure is a reasonable, available, and practical shall be used.

Regulation **401 KAP 9:010**, New process operations applicable to each affected facility associated with a ocess operation commenced after July 2, 1975, limits particulate emissions.

**Permit Number:** <u>V-98-032</u> **Page:** <u>8</u> **of** <u>26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Operating Limitations:**

#### 401 KAR 50:012

The following limits represent the degree of control which is required. Section KAR 50:012.

- 1. The fountain solution shall be limited to a maximum of 8.5% double content volume if the fountain is refrigerated below 60° F or to a maxim of 5% alcolumnt a volume if the fountain temperature is at or above 60° F.
- 2. A thermometer or other temperature detection device with 0.5° F shall be used and attached to a continuous record temperature of the fountain solution.

Note: This condition is required to demonstrate compliance with Open to the window with the second term of t

3. A conductivity meter shall be used at the fountain and the later shall undoctored water used in the fountain so that isopropyl alcohol conce measured accurately.

Note: This condition is required to demonstrate concentration is required to demonstrate concentrations and the second se

4. Cleaning solutions shall be limited to a VC partial partial

#### Compliance Demonstration Metho Operating Limit #1

If deemed necessary, the Cabinet and obtain sales of the freedain solution at the reservoir to verify compliance with this pairiement the EPA whole 415.1) or received the ter comparation and solutions.

may be used (this method shall not be used to replace) same onstrate at the fountain.

#### 401 KAR 3

To satisfy CFR 70.6, the following limit will apply.

5. Pases using be vented into the pressroom.

### And the Constant Area Constant Limits And Less than Significant Limits

See Section D for lim

#### sion Limitations:

#### 401 KAR 59:010

1. Section 3(1) mits visible emissions to less than 20% opacity.

Section / limits emissions of particulate matter to a maximum of 2.34 lbs/hr.

### cainment Area NSR Synthetic Minor and Less than Significant Limits

See Section D for limits.

**Permit Number:** <u>V-98-032</u> **Page:** <u>9</u> **of** <u>26</u>

### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Testing Requirements:**

N/A

#### **Specific Monitoring Requirements:**

#### 401 KAR 50:012

As part of the requirements imposed by Section 1(1) of 401 AR 50:012 & following monitoring shall be required.

- 1. Fountain solution conductivity shall be monitored once partial formula in the fountain solution shall be monitored do not staffer (until the reading stabilizes) any additions to the fountain.
- 2. Fountain solution temperature shall be continuously monited.
- 3. The amount of cleaning solution used shall be monitored to all and the solution recovered shall be monitored once per month.
- 4. Cleaning solution vapor pressure and VOC conterns a setablished has been of credible evidence (ex. MSDS information or a stablished has been of the manufacturer of the cleaning solution change the formation cleaning plution, the permittee changes the composition of the changes in golding solution in the permittee chooses to use a cleaning solution from a different manufacturer of the changes in physical poperties are composition as the monitored.

#### 401 KAR 59:010

See Operating Limitation #5 for parement will be used to assure compliance and replace monitoring requirement associated will KAP 2.010.

#### Specific Representation Specific Representation Rep

#### 012

As present and a variety of 401 KAR 50:012, the following records be required

- 1. All four ctivity more all be recorded.
- 2. The term of fountain conshall be recorded continuously by a strip chart, consulter, or souther, or
- 3 The cleaning solution and amount used, and amount recovered shall be recorded when monitored ( Monitoring Requirements #3 and #4).
- 4. Any corrective act his pen to rectify a monitored parameter out of its normal operating range shall be recorded daily.

Nonattainment A a NSR Synthetic Minor and Less than Significant Requirements. See Section D for equirements.

Permit Number: V-98-032 Page: 10 of

<u> 26</u>

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Reporting Requirements:**

#### 401 KAR 50:012

As part of the requirements imposed by Section 1(1) of 401 KA 012, the reporting shall be required.

- 1. Any exceedance of a permit condition, duration, and correction actions talk shall itemized in a report (if there are no exceedances or correction actions take units shall reported also), certified by a responsible official, and degree or promarked to the Divisions Florence Regional Office within thirty days followed as of each quarter.
- 2. All fountain monitoring shall be converted to alcohol concerning temperature and itemized by date and time in a report, certified and delivered or postmarked to the Division=s Florence Regional thirty days following the end of each quarter.

Nonattainment Area NSR Synthetic Minor and Less mificant Req. See Section D for requirements

#### **Specific Control Equipment Operating Conditions**

N/A

#### **Alternate Operating Scenarios:**

N/A

#### **Compliance Schedule:**

N/A

#### **Compliance Certification Requireme**

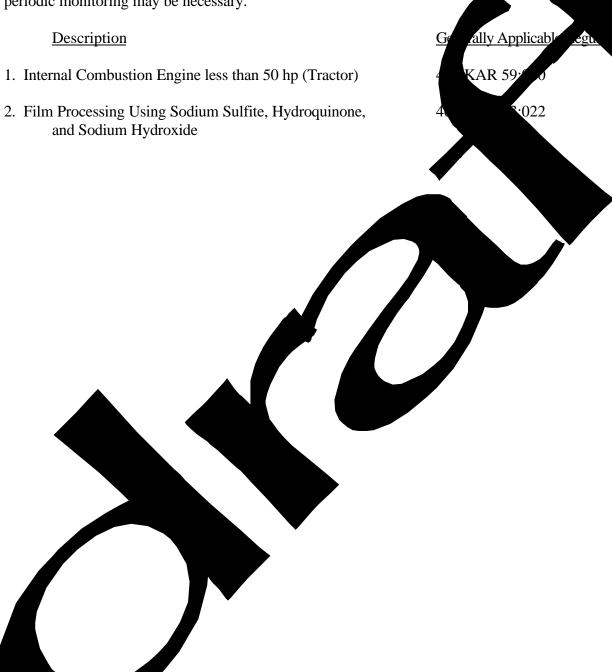
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Permit Number: <u>V-98-032</u> Page: <u>11</u> of <u>26</u>

### **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designed as insignificant the permittee must comply with the applicable regulation and some minimperiodic monitoring may be necessary.



### SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

Nonattainment Area NSR Synthetic Minor and Less than Significant Line have voluntarily been accepted for several emission units to avoid applicability of 51:052, Review of new sources in or impacting upon nonattainment as several emission.

#### **Emission Limitations:**

#### EP02 (02W and 01SF) nonattainment area NSR synthetic market limitation

1. VOC emissions from 02W and 01SF shall total 88 tons per ear or less as amonstrate on a monthly basis.

### EP03 (02SF, 03SF, 04SF, 05SF and 06SF) nonattainment at limitation

2. VOC emissions from 02SF, 03SF, 04SF, 05SF, and 06SF shares as demonstrated on a monthly basis.

#### EP04 (07SF) nonattainment area NSR less than significant limitation

3. VOC emissions from 07SF shall be limited to no more than 23 to demonstrated on a monthly basis.

#### **Compliance Demonstration Method:**

The Control Technology Guidance (CTG) et aded Control of Compound Emissions from Offset Lithographic Printing and its June 194 supposed as described to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate capture efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate the substrate efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate the substrate efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate the substrate efficiency and substrate retention of offset lithographic printing and its June 194 supposed to estimate the substrate efficiency and substrate efficienc

20% of the VOCs in heat set, are retain by the substace

95% of the VOCs in nonheat t inks are r

750° recovery of clear as sections is required and as such should not be course as remitted

Cs used it process shall be assumed to be emitted. The following estimates the second of the second

10c the heat set inks

40% cases VOCs en use of cleaning solutions

70% co QCs emitte in the fountain solution

By using these est material balance, the following formula may be used to determine emissions.

Or superior demonstration methods may be approved by the died for and found to adequately apply.

For presses without C control equipment:

Temitted (lbs) =  $\frac{3}{2}$  gallons of ink x (1 - substrate retention) x VOC content of ink (lbs/gal)]

- **3** [gallow a cleaning solution used x 0.5 x VOC content of solvent (lbs/gal)]
  - + **3** [gallons of isopropyl alcohol used x 6.57 lbs/gal]
- ons of nonalcohol fountain additive used x VOC content of the additive (lbs/gal)]
  - + **3** [gallons of aqueous coating used x VOC content of the coating (lbs/gal)]

Permit Number: <u>V-98-032</u> Page: <u>13</u> of 26

### SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

#### **Emission Limitations (Continued):**

#### **Compliance Demonstration Method (Continued):**

For presses with VOC control equipment:

VOC emitted (lbs) = (1 - control efficiency of the equation of the equation x

**3** [ink uncontolled emission (lbs)] + 0.6 x **3** [cleaning solution unit introlled emission (lbs)]

+ 0.4 x (1 - control efficiency of the equipment) x **3** [coung solven uncontrolled emission (lbs)] + 0.3 x **3** [alcohol and an additives uncontrolled emission (lbs)] + 0.7 x (1 - control efficiency unipment)

x 3 [alcohol and other fountain additives uncontrolled ex

where ink, cleaning solution, alcohol, and other fountain additive uncontre equal to the respective emissions from the equation from sees without equipment.

#### **Specific Recordkeeping Requirements:**

Nonattainment area NSR synthetic minor and less that signs in the following to be recorded.

#### EP02 (02W and 01SF)

- 1. Gallons of heat set ink used at a hall be repreded month along with the actual or maximum VOC content (mass take) of the k.
- 2. Gallons of sheet fed ink used on the standard of the sheet fed ink used to sheet fed ink us
- 3. To gallons of iso who whol used a MSF shall be recorded monthly.
- 4 Yons of no patain additive used at 02W and 01SF shall be recorded by a graph of the additive or additives.
- 5. Games a seous coath, seous c
- 6. Total gradient sing solution at 02W and 01SF shall be recorded monthly along with the solution of solutions.

#### EP (02SF, 03SF) T and 06SF)

- Total gallons of such as a used at 02SF, 03SF, 04SF, and 05SF shall be recorded monthly along with a large maximum VOC content (mass/volume) of the ink.
- **8.** Gallons of UV setting in used at 06SF shall be recorded monthly along with the actual or maximum VOC of tent (mass/volume) of the ink.
- **9.** Total gallons of sopropyl alcohol used at 02SF, 03SF, 04SF, 05SF, and 06SF shall be recorded more v.
- 10. Total gall of nonalcohol fountain additive used at 02SF, 03SF, 04SF, 05SF, and 06SF corded monthly along with VOC content of the additive or additives.
  - gallons of aqueous coating used at 02SF, 03SF, and 04SF shall be recorded monthly along with the VOC content of the coating or coatings.
- **12.** Total gallons of cleaning solution used at 02SF, 03SF, 04SF, 05SF, and 06SF shall be recorded monthly along with the VOC content of the solution or solutions.

Permit Number: V-98-032 Page: 14 of

<u> 26</u>

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

### **Specific Recordkeeping Requirements (Continued):**

EP04 (07SF)

- 13. Gallons of UV setting ink used at 07SF shall be recorded month g with h maximum VOC content (mass/volume) of the ink.
- **14.** Gallons of isopropyl alcohol used at 07SF shall be recorded nonthly.
- **15.** Gallons of nonalcohol fountain additive used at 07SF shall be corded more by along whe VOC content of the additive or additives.
- **16.** Gallons of aqueous coating used at 07SF shall be recorded content of the coating or coatings.
- **17.** Total gallons of cleaning solution used at 07SF shall be record volume volume volume volume.

#### **Specific Reporting Requirements:**

Nonattainment area NSR synthetic minor and less than significant limits, the following to be reported on a quarterly basis. The synthetic shall be compared to the compared to

- 1. All specific recordkeeping requirem at listed in action D slar reported.
- 2. The amount of VOC used each painting the quarter at each Electrical be reported.
- 3. The amount of VOC emissions a month in the quarter at the EP shall be reported.
- 4. The amount of VOC emission for the most for each month in the quarte

Note: Puring the first V after issue after

#### General Co. Requirem Section:

- 1. VOC en peasured by secretary ferenced in 401 KAR 50:015, Section 1, shall not exceed the secretary ferein.
- 2. Copy rance with sions and processing limitations imposed pursuant to 401 KAR 56 235, Section 7(1) trained in this permit, shall be based on emissions and rocessing rates for a sions and rocessing limitations imposed pursuant to 401 KAR 156 235, Section 7(1) trained in this permit, shall be based on emissions and rocessing rates for a sions are processing limitations imposed pursuant to 401 KAR 156 235, Section 7(1) trained in this permit, shall be based on emissions and rocessing rates for a sions are processing limitations imposed pursuant to 401 KAR 156 235, Section 7(1) trained in this permit, shall be based on emissions and rocessing rates for a sions are processing limitations imposed pursuant to 401 KAR 156 235, Section 7(1) trained in this permit, shall be based on emissions and rocessing rates for a sions are processing rates for a sions are processing rates for a sions are processed by the sion

Permit Number: V-98-032 Page: 15 of

26

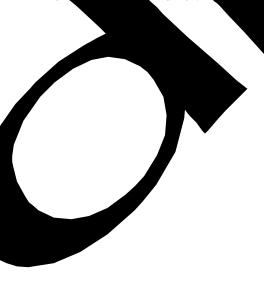
### SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and perate any affected facility including associated air pollution control equipment in consistent with good air pollution control practice for minimizing errorions. Do of whether acceptable operating and maintenance procedures are long used will be information available to the division which may include, but it not limited to, and results, opacity observations, review of operating and maintenant procedures, a inspect of the source.

#### 2. **401 KAR 50:012**

The source has agreed to install a thermal oxidizer on the pressent that set ink (this means **01W** and **02W**) as part of the emission limitation required of 401 KAR 50:012.

- a. Since the permittee has proposed to control VOC emissions from both particles with one thermal oxidizer, the thermal oxidizer shall least capable and some some series of the series
- b. The minimum thermal oxidizer residence the shall be a conde
- c. The thermal oxidizer shall be operated at temperature difficulty of the VOC emissions from the dryer maust stacke as determined the testing) while either press is in operation.
- d. A temperature monitoring device and be instand, calibrated maintained, and operated according to manufacturers it acctions in the combustion damber. The temperature monitoring device shall have precision of a sor minute. 5° F.
- e. See Section B **EP01** are the ress that use the sting, monitors and dkeeping, and requirements associated with the section of the the section of the the section of the the section of t
- f. I for the Constitution oxidizer. Schedule proposed for installation and initial utilization oxidizer.



**Permit Number:** <u>V-98-032</u> **Page:** <u>16</u> **of** 

26

# SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental more than the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee shall compile records of required monitoring information that includes the permittee of the permittee of

- a. Date, place as defined in this permit, and time of sampling or presents.
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measuren
- 2. Records of all required monitoring data and support information and calibrations, maintenance records, and original strip chart recordings, and calibrations, rts required by the Division for Air Quality, shall be retained by the permanent for a live years and shall be made available for inspection upon request by any duly authors of the Division for Air Quality. [401 KAR 50:035, Permits of the Division for Air Quali
- 3. In accordance with the requirements of Regulat 2 401 KAV. The permittee shall allow the Cabinet or authorized representative the following:
  - a. Enter upon the premises where a sorce is local d or emission and activity is conducted, or where records are
  - b. Have access to and copy, at real etimes, by records regarded by the permit:
    - i. During normal office hour
    - ii. During periods of emergacy when practices to cords is essential to proper assessment by the Chin
  - y facilities, ancluding monitoring and pollution or operation paried by the permit. Reasonable times the following:
    - hours of o
    - ii. A soperated during all hours of operation at the source and the sen 8:00 a 4:30 p.m., Monday through Friday, excluding
    - During an and
  - Sample or monit with the permit of the cable requirements. Reasonable times shall include, but are not limited to the table regiments.
    - i. During all hopes of operation at the source,
    - ii. For all source operated intermittently, during all hours of operation at the source and the hours of tween 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holiday and
    - iii. During an emergency.

Permit Number: V-98-032 Page: 17 of

<u> 26</u>

# SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or a rized representative while in the process of carrying out official duties. Refusal of entring may constitute grounds for permit revocation and assessment of circumpalties.

- 5. Reports of any monitoring required by this permit, other than co uous emissio monitors, shall be reported to the Division's Florence Regiona ffice no late an the s month anniversary date of this permit and every six months the fter duri the life of this permit, unless otherwise stated in this permit. Data from the co ssion and opacity monitors shall be reported to the Technical Services Bran ordance with the requirements of Regulation 401 KAR 59:005, General Provisions 3). All reports shall be certified by a responsible official pursuant to Section 6 p 401 KAR 50:035, Permits. All deviations from permit requirements s ed in the be cle reports.
- 6. a. In accordance with the provisions of Regulation 955, Section owner or operator shall notify the Division for Air Quality of State of
  - 1. When emissions during any planned autdowns at lense that three (3) the standards notification shall be may no later that three (3) three (3) three the planned shutdown, or immediately following the decision to shut do in, if the shutdown is due to events which could not have a forest at three (3) day before the shutdown.
  - 2. When emissions due to more actions, up and shutdows and ensuing startups are or may be in excess of the andards not ion shall be made as promptly as possible by telephone (or other entronic median see written notice upon request.
  - b. It fordance with the ons of Reg (AR 50:035, Section 7(1)(e)2, the report do that from permit requirements including (other than emission exceedances covered by general above) to for Air Quality's Florence Regional Office.
- Pursuant to 101 KAR 5 and 201 KAR 5 are semits, Section 7(2)(b), the permittee shall certify compliance and condoms contained in this permit, annually on the permitting and returning a Compliance Certification Form (DEP 7 51CC) (or an application of the Division for Air Quality's Florence Regional Office and the U.S. Experiments:
  - a. Identification of each tend or condition of the permit that is the basis of the certification;
  - b. The compliance so us regarding each term or condition of the permit;
  - c. Whether complice was continuous or intermittent; and
  - d. The method use for determining the compliance status for the source, currently and over the reporting eriod, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
  - The contaction shall be postmarked by the thirtieth (30) day following the applicable suance anniversary date.

**Permit Number:** <u>V-98-032</u> **Page:** <u>18</u> **of** 

26

## SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Florence Regional Office 7960 Kentucky Drive, Suite #8 Florence, KY 41042 U.S. EPA Regional Air Enforcem a Franch Atlanta Federal Center 61 Forsyth Atlanta, G. 303-896

- 8. In accordance with Regulation 401 KAR 50:035, Section 23, the shall provide the division with all information necessary to determine its subject days of the date the KEIS emission report is mailed to the permit.
- 9. Pursuant to Section VII.3 of the policy manual of the Divisio, for Air Quantum Section 401 KAR 50:016, Section 1(1), results of performance test(s, permit shall be submitted to the Division by the source days after the completion of the fieldwork.



**Permit Number:** <u>V-98-032</u> **Page:** <u>19</u> **of** 

26

#### **SECTION G - GENERAL CONDITIONS**

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. A noncompliance shall violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) and violation of Federal Statute 42 USC 7401 through 7671q (the Clear Act) and for enforcement action including but not limited to the termination of acation and report revision of this permit.

- 2. The filing of a request by the permittee for any permit revisit revocation reissuance, or termination, or of a notification of a planned change or anticipation and planned stay any permit condition.
- 3. This permit may be revised, revoked, reopened and reissued, or the permit will be reopened for cause and revised accordingly under the following stances:
  - a. If additional applicable requirements become applicable to the source ning permit term is three (3) years or longer. In this case ening shall b later than eighteen (18) months after promulg plicable requ reopening shall not be required if compliant le requirement is not required until after the date on which the p this ermit or any of its terms and conditions have been ex ided pursug KAR 50:035. to N Section 12(2)(c);
  - b. The Cabinet or the U. S. EPA detection has that the permit must be revised or revoked to assure compliance with the appropriate requirements.;
  - c. The Cabinet or the U. S. EPA mines that permit controls a material mistake or that inaccurate statements were not in establish the emissions standards or other terms or conditions of the permit.

a permit si show the same procedures as apply to to reope only those parts of the permit for which cause to reopen uance and editiously as practicable. Reopenings shall not be s shall be exists ce of inter provided to the source by the Division, at least initiated ce of the ermit is to be reopened, except that the Division thirty (30) o may pre period in case of an emergency.

4. The permittee shall are the Division, in writing, information that the Division may equest to determine we are see exists for modifying, revoking and reissuing, or terminating the permit, or to determine ampliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 K \$ 50:035, Permits, Section 7(3)(j)]

The permittee, up a becoming aware that any relevant facts were omitted or incorrect information was comitted in the permit application, shall promptly submit such supplementary at or comment of information to the permitting authority.

#### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]

- 7. The permittee shall not use as a defense in an enforcement action to maintain that have been necessary to halt or reduce the permitted activity in or to maintain couple [401 KAR 50:035, Permits, Section 7(3)(e)]
- 8. Except as identified as state-origin requirements in this per contained herein shall be enforceable by the United States Environments and citizens of the United States.
- 9. This permit shall be subject to suspension if the permittee fails pay all ses within 90 days after the date of notice as specified in 401 KAR 50:038, Section 50:035, Permits, Section 7(3)(h)]
- 10. Nothing in this permit shall alter or affect the liable of applicable requirements prior to or at the time of termit issues (AR 50: 85, Permits, Section 8(3)(b)]
- 11. This permit shall not convey property this or exclusive privile es. [401 KAR 50:035, Permits, Section 7 (3)(g)]
- 12. Issuance of this permit does not a ve the permit of the permits, licenses, or a property of the permits, licenses, or a property of the permits of the permits, licenses, or a property of the permits of the permit
- 13. A permit so a affect the authority of U.S. EPA to obtain information pursuant all Statute 14, Inspections, monitoring, and entry. [401 KAR 50:035], a strong 7(2).
- 14. Nothing by a latter of the authority of U.S. EPA to impose emergency order pursuant a statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Punits, Section 8(3)]
- 15. Permit Shield: Except produced in State Regulation 401 KAR 50:035, Permits, compliance by the affected facility listed herein with the conditions of this permit shall be deemed to be compliance with all policable requirements identified in this permit as of the date of issuance of this permit.
  - Uprevious sued construction and operating permits are hereby null and void.

Permit Number: V-98-032 Page: 21 of

26

SECTION G - GENERAL CONDITIONS (CONTINUED)

#### (b) <u>Permit Expiration and Reapplication Requirements</u>

This permit shall remain in effect for a fixed term of five (5) years following the original date issue. Permit expiration shall terminate the source's right to operate unless a timely and complete application has been submitted to the Division at least six months prior to the expiration permit. Upon a timely and complete submittal, the authorization to operate within the teconditions of this permit, including any permit shield, shall remain in effect eyond the expiration until the renewal permit is issued or denied by the Division. [401 KAR 1:035, Permit Acction 1.03]

#### (c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revision to volving the use of economic incentive, marketable permit, emission trading, and other extent that these minor permit revision procedures are explicitly to the SIP or in applicable requirements and meet the relevant requirements of kegulah. Section 15.
- 2. This permit is not transferable by the permittee. Fu d operators by be proceed as an new permit from the Division for Air Quality. and provided that a administrative amendment if no other change is nis permi written agreement containing a specific date transfer of coverage and liability between the current and new perm ee has been abmitted mitting authority thirty (30) days in advance of the transfe

### (d) <u>Construction, Start-Up, and Initial pupiliance Defonstration Requirements</u> This applies to 07SF and instal con of the total and oxidize

- 1. Construction of process and or a pollution construction of process and or a pollution construction of process and or a pollution construction of this permit shall be consisted and complete the conditions of this permit.
- mencement of construction, and within fifteen (15) days 2. (80) days to follo and atta maximum production rate specified in the permit wing the issuance date of this permit, whichever fifteen (1 applicati asion for Air Quality's Florence Regional Office is later, the all furnish in writip e Division ankfort Central Office, notification of the following: commenced. date when
  - The date of start sected facilities listed in this permit.
  - . The date when the production rate specified in the permit application was achieved.

#### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

Pursuant to State Regulation 401 KAR 50:035, Permits, Section 13(1), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or processor construction is not completed within eighteen (18) months of the schooled complete then the construction and operating authority granted by this permit be mose affected for which construction was not completed shall immediately beginned invalid. Examples the time periods specified herein may be granted by the Division upon a satisfy ory requisitioning that an extension is justified.

- 4. Operation of the affected facilities for which construction is authorized his permit shall not commence until compliance with the applicable standards are the rein has been demonstrated pursuant to 401 KAR 50:055, except as provided in the permit.
- 5. This permit shall allow time for the initial start-up, operation, and compliant cation of the affected facilities listed herein. However, within (60) days afte maximum production rate at which the affected faci perated but 180 days after initial start-up of such facilities, onduct a per ormance demonstration (see Testing Requirements in Se ilities accordance on B) on t with Regulation 401 KAR 50:055, General mpliance i performance tests must also be conducted in accordan with Gen al Condi 6 of this permit Quality's and the permittee must furnish to the ision for ankfort Central Office a written report of the results of erforma e test.
- 6. Pursuant to Section VII 2.(1) of the olicy manu the Divis for Air Quality as referenced by Regulation 401 KAR 5 Section 1.( month prior to the date of the requi nittee shall return a Compliance Test Protocol erformance ter 6027) to 1 Frankfort C Office. Pursuant to 401 KAR 50:045, ed of the actual test date at least ten (10) days prior to **Division** si the te
- (e) Acid Rain F uirements
- 1. If an appear of the federal statute 42 USC 7401 through 7671q (the Clean Air Act amore string applicable requirement promulgated pursuant to Federal Statute USC 7651 through IV of the Act), both provisions shall apply, and both shall be state and federally inc.

**Permit Number:** <u>V-98-032</u> **Page:** <u>23</u> **of** 

<u> 26</u>

### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

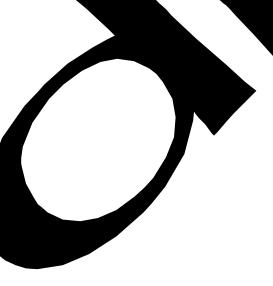
#### (f) <u>Emergency Provisions</u>

1. An emergency shall constitute an affirmative defense to an action brought for nonco with the technology-based emission limitations if the permittee demonstrates through signed contemporaneous operating logs or other relevant evidence the signed contemporaneous operating logs or other relevant evidence the signed contemporaneous operating logs or other relevant evidence the signed contemporaneous operating logs or other relevant evidence.

- a. An emergency occurred and the permittee can identify the cav
- b. The permitted facility was at the time being properly operat
- c. During an emergency, the permittee took all reasonable eps to minimal levels emissions that exceeded the emissions standards or other remembers in the permit; and,
- d. The permittee notified the Division as promptly as possible a subtract whiten notice of the emergency to the Division within two working days the me when emission limitations were exceeded due to the emergency. The notice of 401 KAR 50:035, Permits, Section 7(1)(e)2, and incomparison of the emergency, steps taken to mitigate emissions, and the corrective requirement does not relieve the source of any other local, state or in requirements.
- 2. Emergency conditions listed in General Condition (a label) lition to any emergency or upset provision(s) contained in an applicable equirement
- 3. In an enforcement proceeding, the permatee seeking to establish a courrence of an emergency shall have the burden of proceeding. [401 KA 30:035, Permats, Section 9(3)]

#### (g) <u>Risk Management Provisions</u>

- 1. The permittee shall comply with all applical requirement of 40 CFR Part 68, Risk Management Plan provisions. I required, the
  - a. So it a Risk Manar and to U.S.E with a copy to this Division and with the Report Programme 21, 1999 or a later date specified by A.
  - b. Some on a light on the U.S. EPA.



Permit Number: V-98-032 Page: 24 of

26

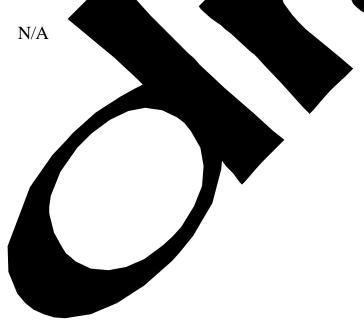
### **SECTION G - GENERAL CONDITIONS (CONTINUED)**

#### (h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction suant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners in Subpart B:

- a. Persons opening appliances for maintenance, service, repair wasposal shah with the required practices contained in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or sposal of appearances should comply with the standards for recycling and recovery equation and the standards for recycling and recycling a
- c. Persons performing maintenance, service, repair, or dispersion of the certified by an approved technician certification program put to CFR 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC at at 40 CFR 82.152) shall comply with the recordkeeping regiment at 40 CFR 82.166.
- e. Persons owning commercial or industrial process reference on equipme with the leak repair requirements pursuant to 40
- f. Owners/operators of appliances normally company pounds of a prigerant shall keep records of refrigerant purchased and added CFR 82.166.
- 2. If the permittee performs service on more (fleet) velocite air conditioners containing ozone-depleting substances, the source shows apply with all applicable equirements as specified in 40 CFR 82, Subpart B, Servicia. Motor Velocite Air Conditioners.

### SECTION ALTERN ERATIN RIOS



#### **SECTION I - COMPLIANCE SCHEDULE**

This section contains compliance schedule requirements as required by Kentucky Regulation 50:035, Permits, Section 7(2)(a). Progress reports on this schedule must be submitted (using the movement version of Form DEP7007B) at least semiannually, or at more frequent intervals if requirements specific conditions outlined below. Reports shall include the following item (a) Date for achieving each milestone, and the actual date that compliance is achieved and (b) An export of why dates in the schedule of compliance were not or will not be method preventive or or measures adopted to ensure that compliance with future items will be a ught back or medule.

- 1. **401 KAR 50:012** has required reasonable, available, and practice of the permittee has not installed the necessary control of the source, the following **determination** has been made.
  - 1. All reasonable, available, and practical controls have not been noncompliance with 401 KAR 50:012.

The source has agreed that the following **controls** are required a correct plane.

- 1. A thermal oxidizer shall be used to eliminate at least 90% of the VOC from 01W and 02W.
- 2. The fountain solution used by 01W and 02W shall be maximum of alcohol content by volume if the fountain is refriger at below a maximum of 1.6% alcohol content by volume if the fountain imperature at
- 3. The fountain solution used by 01SF, 02°F, 03SF, 04°F, 05SF, and shall be limited to a maximum of 8.5% alcohol content by volume in the fountain a remigerated below 60°F or to a maximum of 5% alcohol content by volume if the fountain temperature is at or above 60°F.

The source has agreed to the following correct action.

To comply with control \$\\$1,\$\\$\ following

- The permittee point a proper wision for Air Quality specifying the make, and operating scenario for the thermal idizer to be a control of the thermal bedone by March 1, 1999.
  - be division a written assurance that funds have been for purchas tion of the proposed thermal oxidizer by June 1,
- ball sign a same agreement for installation of the thermal oxidizer by Aug and shall submit to the division evidence of such action within one week
- **4.** The permit egin installation of the thermal oxidizer by October 1, 1999.
- 5. The perm ce wall have the thermal oxidizer and all required monitoring equipmen completely installed and operational by January 1, 2000.
- **6.** The per stee shall demonstrate compliance with the 90% VOC reduction require cent through stack testing on or before July 1, 2000 as required by permit copicions (d)5 and (d)6 of Section G.

dependence of the compliance with control #2 and #3, the following shall be required. The permittee shall install a strip chart, computer, or some other continuous recording device at all fountains used by 01W, 02W, 01SF, 02SF, 03SF, 04SF, 05SF, and 06SF to chronicle the temperature of the fountain solution. This shall be done by January 1, 1999.

Permit Number: V-98-032 Page: 26 of

<u> 26</u>

### **SECTION I - COMPLIANCE SCHEDULE (CONTINUED)**

2. Compliance with the terms and conditions of this Section shall be certified <u>annually on the permit anniversary date</u>, to the Division for Air Quality and to the U. S. EPA when co liance has been achieved. The compliance certification shall include the following:

- a. The identification of the permit term or condition in this Section at is the certification;
- b. The compliance status;
- c. Whether compliance is continuous or intermittent; and,
- d. The method used for determining the compliance status, country and on the reporting period pursuant to Regulation 50:035, Section 7(1)(c),(d)

